ABSTRACT

J.N. 09/002747

A method for achieving high bit densities in a direct-sequence CDMA spread spectrum communication system. A table of orthogonal pseudo-noise codes is stored. This table is then partitioned into multiple codebook. Then, the codebook is assigned to a user. The pseudo-noise code contained within the codebooks are used to spread information signal. Information signal for a first user is spread by a pseudo-noise code contained within the codebook assigned to the first user. Multiple bits of information signal may be sent at a time by using the location of the pseudo-noise code within the codebook such that the value of the information signal corresponds the location of the pseudo-noise code within the codebook. The information signal is then despread by using the same pseudo-noise code.